

**PIPER RUDNICK LLP**  
1200 NINETEENTH STREET, NW  
WASHINGTON, DC 20036-2412  
TELEPHONE: 202-861-3900  
FACSIMILE: 202-223-2085



DOCKET NO.: 9491-066-27 CONT

ASSISTANT COMMISSIONER FOR PATENTS  
PO BOX 1450  
ALEXANDRIA, VA 22313-1450

Re: Serial No.: 10/646,760  
Applicant(s): Kevin P. BAKER, et al.  
Filing Date: August 25, 2003  
For: PROTEIN TYROSINE KINASES

SIR:

Attached hereto for filing are the following papers:

Information Disclosure Statement  
PTO-1449

Our check in the amount of \$ 0.00 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary extension of time to make the filing of the attached documents timely, please charge or credit the difference to Deposit Account No. 50-1442. Further, if these papers are not considered timely filed, then a request is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

PIPER RUDNICK LLP

Steven B. Kelber  
Attorney of Record  
Registration No.: 30,073

Patrick R. Delaney  
Registration No.: 45,338

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION: Kevin BAKER, et al.

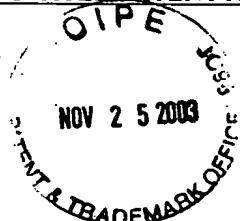
SERIAL NUMBER: 10/646,760

FILED: August 25, 2003

FOR: PROTEIN TYROSINE KINASES

GROUP ART UNIT:

EXAMINER:



INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97

Assistant Commissioner for Patents  
PO BOX 1450  
ALEXANDRIA, VA 22313-1450

Sir:

Applicant(s) wish(es) to disclose the following information.

REFERENCES

- Applicant(s) wish(es) to make of record the documents listed on the attached Form PTO-1449. References AA-CN are of record in parent application U.S. Serial No. 09/223,490, filed December 30, 1998, now allowed. Copies of the listed documents are attached, where required, as are either statements of relevancy or any readily available full or partial English translations of any non-English-language documents.

RELATED CASES

- Attached is a list of Applicant's(s') pending applications and issued patents which may be related to the present application. Copies of the documents, where required, are attached along with Form PTO-1449.

CERTIFICATION

The undersigned certifies that

- each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign or international patent office in a counterpart foreign or international application for the first time (to the knowledge of the undersigned, having made reasonable inquiry) not more than three months prior to the filing of this statement.
- no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign or international patent office in a counterpart foreign or international application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.

BASIS FOR CONSIDERATION

This Information Disclosure Statement is filed:

- without fee and within three months of the filing date of the application.  
 without fee and within three months of the date of entry of the U.S. national stage.  
 without fee and before the mailing date of a first Office Action on the merits (to the knowledge of the undersigned).  
 without fee and with the appropriate certification above.  
 without fee and with a new CPA application.

DEPOSIT ACCOUNT

- Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to Deposit Account No. 50-1442.

Respectfully submitted,

PIPER RUDNICK LLP

Steven B. Kelber  
Attorney of Record  
Registration No. 30,073

Patrick R. Delaney  
Registration No. 338

1200 Nineteenth Street, N.W.  
Washington, DC 20036-2412  
Telephone No. (202) 861-3900  
Facsimile No. (202) 223-2085

Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	DOCKET NO.	NOV 25 2003 U.S. PATENT & TRADEMARK OFFICE	SERIAL NO.
		9491-066-27 CONT		10/646,760
		APPLICANT	Kevin P. BAKER, et al.	
LIST OF REFERENCES CITED BY APPLICANT (Use Several Sheets if Necessary)		FILING DATE	GROUP ART UNIT	
		August 25, 2003		

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	5,677,144	10/14/97	ULLRICH et al.			
	AB	5,530,101	06/25/96	QUEEN et al.			
	AC	5,972,337	10/26/99	CERIANI ET AL.			
	AD	5,185,438	02/09/93	LEMISCHKE			

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES      NO
	AK	455,460	11/6/91	EPO	
	AL	519,869	12/23/92	EPO	
	AM	WO 92/13948	8/20/92	WIPO	
	AN	WO 92/14748	9/3/92	WIPO	
	AO	WO 93/00425	1/7/93	WIPO	
	AP	WO 93/14124	7/22/93	WIPO	
	AQ	WO 93/15201	8/5/93	WIPO	
	AR	WO 93/23429	11/25/93	WIPO	
	AS	WO 94/19463	9/1/94	WIPO	
	AT	WO 98/34954	8/13/98	WIPO	

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	AU	Doerks et al. Protein annotation: detective work for function prediction. Trends in Genetics, June 1998, Vol. 14, No. 6, pages 248-250
	AV	Brenner et al., Errors in Genome Annotation. Trends in Genetics, 1999, 15: 132-133
	AW	Bork et al., Go Hunting in sequence databases but watch out for the traps, Trends in Genetics, 1996, 12: 425-427
	AX	"Chapter 16: Expression of Cloned Genes in Cultured Mammalian Cells" <u>Molecular Cloning: A Laboratory Manual</u> , Sambrook et al., Second edition, Cold Spring Harbor Laboratory Press Vol. 3: 16.2-16.30 (1989)

EXAMINER	DATE CONSIDERED
----------	-----------------

\*EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	DOCKET NO.	SERIAL NO.
		9491-066-27 CONT	NOV 25 2003 U.S. PATENT & TRADEMARK OFFICE
		APPLICANT Kevin P. BAKER, et al.	
LIST OF REFERENCES CITED BY APPLICANT (Use Several Sheets if Necessary)		FILING DATE August 25, 2003	GROUP ART UNIT

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AY	"Chapter 17: Expression of Cloned Genes in Escherichia coli", <u>Molecular Cloning: A Laboratory Manual</u> , Sambrook et al., Second edition, Cold Spring Harbor Laboratory Press Vol. 3:17.2-17.28 (1989)
AZ	Aroian et al., "The let-23 Gene Necessary for Caenorhabditis elegans Vulval Induction Encodes a Tyrosine Kinase of the EGF Receptor Subfamily", <u>Nature</u> 348:693-699 (1990)
BA	Birchmeier et al., "Characterization of an Activated Human ros Gene", <u>Molecular &amp; Cellular Biology</u> 6(9): 3109-3116 (1986)
BB	Brauninger et al., "Isolation and Characterization of a Human Gene That Encodes a New Subclass of Protein Tyrosine Kinases", <u>Gene</u> 110(2): 205-211 (1992)
BC	Capon et al., "Designing CD4 Immunoadhesins for AIDS Therapy", <u>Nature</u> 337:525-531 (February 9, 1989)
BD	Dai et al., "Molecular Cloning of a Novel Receptor Tyrosine Kinase, tif, Highly Expressed in Human Ovary and Testis", <u>Oncogene</u> 9: 975-979 (1994)
BE	Duan et al., "A Functional Soluble Extracellular Region of the Platelet-derived Growth Factor (PDGF) β-Receptor Antagonized PDGF-stimulated Responses", <u>Journal of Biological Chemistry</u> 266(1): 413-418 (January 5, 1991)
BF	Faust et al., "The murine ufo receptor: molecular cloning, chromosomal localization and in situ expression analysis", <u>Oncogene</u> 7:1287-1293 (1992)
BG	Fujimoto, "brt, A Mouse Gene Encoding a Novel Receptor-Type Protein-Tyrosine Kinase, is Preferentially Expressed in the Brain", <u>Oncogene</u> 9:693-698 (1994)
BH	GenBank, "Release 79" (along with hystyro3 and hystyro3y sequences available on GenBank) (October 15, 1993)
BI	Godowski et al., "Reevaluation of the Roles of Protein S and Gas6 as Ligands for the Receptor Tyrosine Kinase Rse/Tyro3", <u>Cell</u> 82:355-358 (August 11, 1995)
BJ	Hanks et al., "The Protein Kinase Family: Conserved Features and Deduced Phylogeny of the Catalytic Domains", <u>Science</u> 241:42-52 (1988)
BK	Hao et al., "Isolation and Sequence Analysis of a Novel Human Tyrosine Kinase Gene", <u>Molecular &amp; Cellular Biology</u> 9(4): 1587-1593 (1989)
BL	Hart et al., "Extracellular Domain of the Boss Transmembrane Ligand Acts as an Antagonist of the Sev Receptor", <u>Nature</u> 361:732-736 (1993)

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	

NOV 25 2003

Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	DOCKET NO.	SERIAL NO.
		9491-066-27 CONT	10/646,760
LIST OF REFERENCES CITED BY APPLICANT (Use Several Sheets if Necessary)		APPLICANT	
		Kevin P. BAKER, et al.	FILING DATE
		August 25, 2003	GROUP ART UNIT

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

BM	Holtrich et al., "Two Additional Protein-Tyrosine Kinases Expressed in Human Lung: Fourth Member of the Fibroblast Growth Factor Receptor Family and an Intracellular Protein-Tyrosine", <u>Proc. Natl. Acad. Sci.</u> 88:10411-10415 (1991)
BN	Janssen et al., "A novel putative tyrosine kinase receptor with oncogenic potential", <u>Oncogene</u> 6:2113-2120 (1991)
BO	Johnson et al., "A receptor tyrosine kinase found in breast carcinoma cells has an extracellular discoidin I-like domain", <u>Proc. Natl. Acad. Sci.</u> 90:5677-5681 (June 15, 1993)
BP	Lai et al., "An Extended Family of Protein-Tyrosine Kinase Genes Differentially Expressed in the Vertebrate Nervous System", <u>Neuron</u> 6:691-704 (May 1991)
BQ	Lai et al., "Structure, Expression, and Activity of Tyro 3, a Neural Adhesion-related Receptor Tyrosine Kinase", <u>Oncogene</u> 9:2567-2578 (1994)
BR	Li et al., "Identification of Gas6 as a Growth Factor for Human Schwann Cells", <u>The Journal of Neuroscience</u> 16(6):2012-2019 (March 15, 1996)
BS	Mark et al., "rse, a Novel Receptor-type Tyrosine Kinase with Homology to Axl/Ufo, Is Expressed at High Levels in the Brain", <u>Journal of Biological Chemistry</u> 269(14):10720-10728 (April 8, 1994)
BT	Martin-Zanca et al., "Molecular and Biochemical Characterization of the Human trk Proto-Oncogene", <u>Molecular &amp; Cellular Biology</u> 9(1):24-33 (January 1989)
BU	Matthews et al., "A receptor tyrosine kinase cDNA isolated from a population of enriched primitive hematopoietic cells and exhibiting close genetic linkage to c-kit", <u>Proc. Natl. Acad. Sci.</u> 88:9026-9030 (1991)
BV	Matthews et al., "A receptor tyrosine kinase specific to hematopoietic stem and progenitor cell-enriched populations", <u>Cell</u> 65:1143-1152 (1991)
BW	O'Bryan et al., "axl, A Transforming Gene Isolated From Primary Human Myeloid Leukemia Cells, Encodes a Novel Receptor Tyrosine Kinase", <u>Molecular &amp; Cellular Biology</u> 11(10): 5016-5031 (October 1991)
BX	Ohashi et al., "Cloning of the cDNA for a Novel Receptor Tyrosine Kinase, Sky, Predominantly Expressed in Brain", <u>Oncogene</u> 9:699-705 (1994)

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	DOCKET NO.	SERIAL NO.
		9491-066-27 CONT	NOV 25 2003 U.S. PATENT & TRADEMARK OFFICE 83
		APPLICANT	Kevin P. BAKER, et al.
LIST OF REFERENCES CITED BY APPLICANT (Use Several Sheets if Necessary)		FILING DATE	GROUP ART UNIT
August 25, 2003			

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

BY	O'Bryan et al., "axl, A Transforming Gene Isolated From Primary Human Myeloid Leukemia Cells, Encodes a Novel Receptor Tyrosine Kinase", <u>Molecular &amp; Cellular Biology</u> 11(10): 5016-5031 (October 1991)
BZ	Ohashi et al., "Cloning of the cDNA for a Novel Receptor Tyrosine Kinase, Sky, Predominantly Expressed in Brain", <u>Oncogene</u> 9:699-705 (1994)
CA	Paborsky et al., "Mammalian Cell Transient Expression of Tissue Factor for the Production of Antigen", <u>Protein Eng.</u> 3(6):547-553 (1990)
CB	Park et al., "Sequence of MET Protooncogene cDNA has Features Characteristic of the Tyrosine Kinase Family of Growth-Factor Receptors", <u>Proc. Natl. Acad. Sci. USA</u> 84:6379-6383 (1987)
CC	Partanen et al., "Putative Tyrosine Kinases Expressed in K-562 Human Leukemia Cells", <u>Proc. Natl. Acad. Sci.</u> 87:8913-8917 (1990)
CD	Pazin et al., "Triggering Signaling Cascades by Receptor Tyrosine Kinases", <u>TIBS</u> 17:374-378 (1992)
CE	Polvi et al., "The Human TYRO3 Gene and Pseudogene are Located in Chromosome 15q14-q25", <u>Gene</u> 134:289-293 (1993)
CF	Pulido et al., "Etrk, a Drosophila Gene Related to the trk Family of Neurotrophin Receptors, Encodes a Novel Class of Neural Cell Adhesion Molecule", <u>EMBO Journal</u> 11(2):391-404 (1992)
CG	Rescigno et al., "A putative receptor tyrosine kinase with unique structural topology", <u>Oncogene</u> 6:1909-1913 (1991)
CH	Sarup, "Characterization of an Anti-P185 <sup>ner2</sup> Monoclonal Antibody that Stimulates Receptor Function and Inhibits Tumor Cell Growth", <u>Growth Regulation</u> 1:72-82 (1991)
CI	Schlessinger et al., "Growth factor signaling by receptor tyrosine kinases", <u>Neuron</u> 9:383-391 (1992)
CJ	Stark et al., "FGFR-4, a new member of the fibroblast growth factor receptor family, expressed in the definitive endoderm and skeletal muscle lineages of the mouse", <u>Development</u> 113:641-651 (1991)
CK	Taylor et al., "Mouse Mammary Tumors Express Elevated Levels of RNA Encoding the Murine Homolog of SKY, a Putative Receptor Tyrosine Kinase", <u>The Journal of Biological Chemistry</u> 270(12):6872-6880 (March 24, 1995)
CL	Ullrich et al., "Insulin-like growth factor I receptor primary structure: comparison with insulin receptor suggests structural determinants that define functional specificity", <u>EMBO Journal</u> 5(10):2503-2512 (1986)
CM	Wilks et al., "The application of the polymerase chain reaction to cloning members of the protein tyrosine kinase family", <u>Gene</u> 85:67-74 (1989)

\*EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	DOCKET NO.	SERIAL NO.	
		9491-066-27 CONT	NOV 25 2003 U.S. PATENT & TRADEMARK OFFICE	10/646,760
		APPLICANT	Kevin P. BAKER, et al.	
LIST OF REFERENCES CITED BY APPLICANT (Use Several Sheets if Necessary)		FILING DATE	GROUP ART UNIT	
August 25, 2003				
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)				
CN	Yarden, "Agonistic Antibodies Stimulate the Kinase Encoded by the neu Protooncogene in Living Cells but the Oncogenic Mutant is Constitutively Active", <u>Proc. Natl. Acad. Sci. USA</u> 87:2569-2573 (1990)			
CO	Zerlin et al., "NEP:a novel receptor-like tyrosine kinase expressed in proliferating neurepithelia", <u>Oncogene</u> 8(10):2731-2739 (October 1993)			
CP	Ullrich et al., "Human Insulin Receptor and Its Relationship to the Tyrosine Kinase Family of Oncogenes", <u>Nature</u> 313:756-761 (1985)			
CP	Ullrich et al., "Signal Transduction by Receptors with Tyrosine Kinase Activity", <u>Cell</u> 81:203-212 (1990)			
CQ	Eager, KB, Molecular characterization of human trk proto-oncogene product monoclonal antibodies, <u>Oncogene</u> , (1991), 6, 819-824			
CR	Queen, C, et al., "A humanized antibody that binds to the interleukin 2 receptor", <u>Proc. Natl. Acad. Sci. USA</u> , 1989, Vol. 86, 10029-10033			
CS	Tartaglia, LA, "Tumor Necrosis Factor Receptor Signaling", 1992, <u>J. Biol. Chem.</u> , Vol. 267 (7) 4304-4307			
CT	Mikayama T., "Molecular cloning and functional expression of a cDNA encoding glycosylation-inhibiting factor", <u>Proc. Natl. Acad. Sci. USA</u> , Vol. 90, pp. 10056-10060, 1993			
CU	Voet et al., <u>Biochemistry</u> , 1990, John Willey & Sons, Inc., pp. 126-128 and 228-234			
CV	Bowie et al., "Deciphering the Mesage in Protein Sequences: Tolerance to Amino Acid Substitutions", <u>Science</u> , Vol. 247, pp. 1306-1310, 1990			
EXAMINER		DATE CONSIDERED		
<p>*EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.</p>				